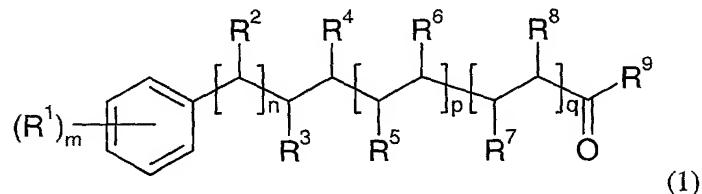


CLAIMS

1. A method of treating a subject having a skin condition selected from the group of conditions (a) those treatable by stimulation of melanocyte proliferation and (b) melanomas, which comprises administering to the subject an effective amount of a
5 compound of formula (1)



wherein n = 0 or 1;

p is 0 or 1;

10 q is 0 or 1

when n = p = q = 0, R³ and R⁴ represent hydrogen or together represent a carbon to carbon double bond;

when n = 0 and one of p and q = 1, R³ and R⁴ together and one of R⁵ and R⁶ together or R⁷ and R⁸ together represent carbon to carbon double bonds, R³ and R⁴ together represent a carbon to carbon double bond and R⁵ and R⁶ or R⁷ and R⁸ represent hydrogen atoms, R³ and R⁴ represent hydrogen and one of R⁵ and R⁶ together or R⁷ and R⁸ together represent carbon to carbon double bonds or R³, R⁴, R⁵, R⁶, R⁷ and R⁸ all represent hydrogen atoms;

15 when n = 0 and p = q = 1, R³ and R⁴ together and one of R⁵ and R⁶ together or R⁷ and R⁸ together represent carbon to carbon double bonds the other of R⁵, R⁶, R⁷ and R⁸ representing hydrogen, R³ and R⁴ together represent a carbon to carbon double bond and R⁵ and R⁶ or R⁷ and R⁸ represent hydrogen atoms, R³ and R⁴ represent hydrogen and one of R⁵ and R⁶ together or R⁷ and R⁸ together represent carbon to carbon double bonds the other of R⁵, R⁶, R⁷ and R⁸ representing hydrogen, R³ and R⁴ together, R⁵ and R⁶ together and R⁷ and R⁸ together represent carbon to carbon double bonds or R³, R⁴, R⁵, R⁶, R⁷ and R⁸ all represent hydrogen atoms;

20 or optionally when n is 1 R² and R³ together represent a carbon to carbon double bond and one or more of R⁴ and R⁵ together, R⁵ and R⁶ together, R⁶ and R⁷ together or R⁷ and R⁸ all represent hydrogen atoms;

25 or optionally when n is 1 R² and R³ together represent a carbon to carbon double bond and one or more of R⁴ and R⁵ together, R⁵ and R⁶ together, R⁶ and R⁷ together or R⁷ and R⁸ all represent hydrogen atoms;

R⁸ together represent a carbon to carbon double bond the other of R⁴ to R⁸ representing hydrogen;

m = 1, 2 or 3;

when m = 1, R¹ represents an alkoxy group having from 1 to 3 carbon atoms or a hydroxy group;

when m = 2, each R¹ independently represents an alkoxy group having from 1 to 3 carbon atoms or the two R¹'s together represent a 3', 4'-methylenedioxy group;

when m = 3, two R¹'s together represent a 3', 4'-methylenedioxy group and the other R¹ represents an alkoxy group having from 1 to 3 carbon atoms or a hydroxy group;

10 R⁹ represents a pyrrolidino, piperidino, 4-methylpiperidino or morpholino group, a N-monoalkylamino group of 4 to 6 carbon atoms, a N-monocycloalkylamino group of 4 to 7 carbon atoms, a 3', 4'-methylenedioxy-substituted benzylamino or 2-phenethylamino group or R⁹ represents an alkoxy group of 1 to 6 carbon atoms;

in any of its E, Z geometrically isomeric forms.

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2. The method of Claim 1, wherein the subject is a patient suffering from a melanoma.

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3. The method of Claim 1, wherein the subject is a patient suffering from a skin disorder treatable by stimulation of melanocyte proliferation.

4. The method of Claim 1, wherein the skin disorder is vitiligo.

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5. The method of Claim 1, wherein the compound is administered topically to the area of the skin to be treated.

6. The method of Claim 1, wherein the compound of formula (1) is one in which:

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n = 0, one of p and q = 1, R³ and R⁴ together and one of R⁵ and R⁶ together or R⁷ and R⁸ together represent the second bond of a carbon to carbon double bond the other of R⁵, R⁶, R⁷ and R⁸ representing hydrogen, m=2, the R¹ groups together represent 3',4'-

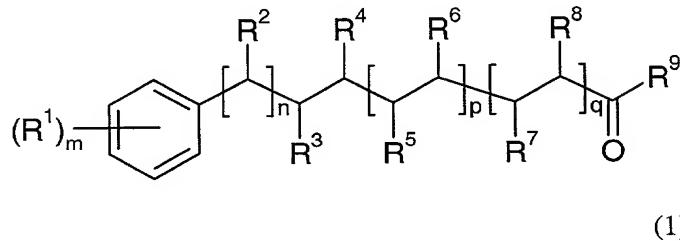
methylenedioxy and R⁹ represents a pyrrolidino, piperidino, morpholino, cyclohexylamino or isobutylamino group.

7. The method of Claim 6, wherein the compound is of the E, E geometric
5 configuration.

8. The method of claim 1, wherein the compound of formula (I) is one in which n is 0, one of p and q is 1, R³, R⁴, R⁵, R⁶, R⁷ and R⁸ represent hydrogen and R⁹ is cyclohexylamino

10 9. The method of Claim 1, wherein the compound of formula (1) is piperine, being the E, E-isomer of the compound of formula (1) in which n = 0, one of p or q = 1, R³ and R⁴ together and one of R⁵ and R⁶ together or R⁷ and R⁸ together represent the second bond of a carbon to carbon double bond, the other of R⁵, R⁶, R⁷ and R⁸ representing 15 hydrogen, m = 2, the R¹ groups together represent 3', 4'-methylenedioxy and R⁹ represents piperidino, and the geometric configuration is E, E.

10. A method of treating a subject having a skin condition selected from the group of conditions (a) those treatable by stimulation of melanocyte proliferation and (b) 20 melanomas, which comprises administering to the subject an effective amount of a compound of formula (1)



(1)

in which

25 (a) n is 0, p and q are each 0 or 1, m is 2, the R¹'s together represent a 3', 4'- methylenedioxy group, R² and R³, together with the carbon atoms to which they are attached form a carbon to carbon double bond and, when p and q are each 0 or 1, R⁵ and

R^6 and R^7 and R^8 together with the carbon atoms to which they are attached, form a carbon to carbon double bond and R^9 is piperidino, or

(b) n is 0, one of p or q is 1 and (i) m is 3, the R^1 's being 3', 4'-methylenedioxy and 6'-methoxy or (ii) m is 2, the R^1 's being 3'-hydroxy-4'-methoxy; or
5 (iii) m is 1 and the R^1 is 4'-hydroxy; and R^3 to R^9 are as defined in case (a) above, or

(c) n is 0, one of p and q is 1, R^9 is piperidino, pyroolidino, isobutylamino or methoxy and all other symbols are as defined in case (a) above, or

(d) n is 0, one of p and q is 1, R^4 and R^5 represent hydrogen atoms and either R^2 and R^3 also do or R^2 and R^3 together with the carbon atoms to which they are attached form a carbon to carbon double bond; and m , R^1 and R^9 are as defined in case (a) above;

(e) n is 0, $p = q = 1$ and R^3 , R^4 , R^5 , R^6 , R^7 and R^8 represent hydrogen;

(f) n is 0, one of p and q is 1, R^3 , R^4 , R^5 , R^6 , R^7 and R^8 represent hydrogen and R^9 is cyclohexylamino; and

15 in all of which cases (a) to (f) the molecule is in the E,E or all E geometric configuration or in case (a) when n is 1 may be in the Z,Z, Z,E or E,Z geometric configuration.

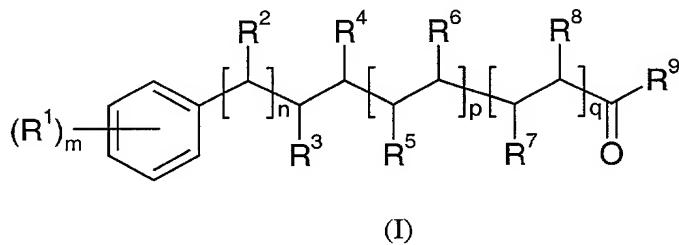
11. The method of Claim 10, wherein the subject is a patient suffering from a melanoma.

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12. The method of Claim 10, wherein the subject is a patient suffering from a skin disorder treatable by stimulation of melanocyte proliferation.

13. The method of Claim 10, wherein the skin disorder is vitiligo.

25 14. A compound of formula (I)



in which n is 0, one of p and q is 1, R³, R⁴, R⁵, R⁶, R⁷ and R⁸ represent hydrogen and R⁹ is cyclohexylamino